

CLAIMS

1. A regenerated collagen fiber which is obtained by treating collagen with a monofunctional epoxy compound and an aluminum salt.

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2. The regenerated collagen fiber of Claim 1, wherein said monofunctional epoxy compound is a compound represented by the following formula (I):

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in which R indicates a substituent group represented by R_1- , $\text{R}_2-\text{O}-\text{CH}_2-$ or $\text{R}_2-\text{COO}-\text{CH}_2-$, R_1 in said substituent group indicates a hydrocarbon group having at least 2 carbon atoms or CH_2Cl and R_2 indicates a hydrocarbon group having at least 4 carbon atoms.

20 3. The regenerated collagen fiber of Claim 2, wherein said R_1 in the formula (I) indicates a hydrocarbon group having 2 to 6 carbon atoms or $-\text{CH}_2\text{Cl}$ and R_2 indicates a hydrocarbon group having 4 to 6 carbon atoms.

25 4. The regenerated collagen fiber of Claim 1, 2 or 3, wherein a methionine group in said collagen is a sulfoxidized methionine group or a sulfonated methionine group. *no basis*

5. A process for preparing the regenerated collagen fiber of

Claim 1 which comprises treating collagen with a monofunctional epoxy compound, and then treating the same in such a way that 2 to 40 % by weight of an aluminum salt converted to an aluminum oxide basis is contained to said collagen.

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6. The process for preparing a regenerated collagen fiber of Claim 5, *wherein said collagen is treated with an oxidant* and then treated with the monofunctional epoxy compound and the aluminum salt.

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7. The process for preparing a regenerated collagen fiber of Claim 6, wherein said oxidant is hydrogen peroxide.

15 8. A process for setting a regenerated collagen fiber which comprises thermally setting the regenerated collagen fiber of Claim 1, 2 or 3 by means of hot water treatment at 20° to 100°C and heat drying treatment at 60° to 220°C.

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